

Name: \_\_\_\_\_

### pa1030: Box multiplication of linear binomials (v7)

#### Example

Use the box method to multiply  $(6x + 3)$  and  $(2x + 4)$ .

*	$6x$	$3$	
$2x$	$12x^2$	$6x$	$12x^2 + 6x + 24x + 12$
$4$	$24x$	$12$	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER:  $12x^2 + 30x + 12$

#### Question 1

Use the box method to multiply  $(3x + 4)$  and  $(5x + 9)$ .

*	$3x$	$4$	
$5x$	$15x^2$	$20x$	
$9$	$27x$	$36$	

ANSWER:  $15x^2 + 47x + 36$

### Question 2

Use the box method to multiply  $(8x + 3)$  and  $(7x - 4)$ .

*	$8x$	$3$
$7x$	$56x^2$	$21x$
$-4$	$-32x$	$-12$

ANSWER:  $56x^2 - 11x - 12$

### Question 3

Use the box method to multiply  $(-9x + 4)$  and  $(3x + 5)$ .

*	$-9x$	$4$
$3x$	$-27x^2$	$12x$
$5$	$-45x$	$20$

ANSWER:  $-27x^2 - 33x + 20$